

REMARKS

Claims 1,2 and 4-7 are all the claims pending in the application.

Allowable Subject Matter

Applicants thank the Examiner for indicating that claim 5 includes allowable subject matter. Applicants have rewritten claim 5 in independent form so that claim 5 is now allowable.

Claim Rejections 35 U.S.C. § 102

Claim 4 stands rejected under 35 U.S.C. § 102(e) as being anticipated by Takeda (U.S. Patent No. 6,878,073). Applicants respectfully traverse this rejection.

Claim 4 sets forth that the material of the middle body is thinner than the material of the front body and the back body. The present application teaches that if the crown portion is more easily bent, a longer carry can be obtained. One way to accomplish this is when the material of the middle body is thinner. Therefore, an exemplary embodiment of the specification teaches that the middle body 11 may be made from a titanium alloy thinner than the front body 10 and the back body 12 (*see* page 12, lines 16 to page 13, line 24).

Takeda teaches the opposite of the claimed invention. With reference to Fig. 3, the thickness *w* of the alleged middle body (plate member 18) is substantially larger than the thickness *t* of the alleged front body (face shell 16) and the alleged back body (back piece/body shell). Accordingly, Takeda does not anticipate claim 4 and Applicants respectfully request that the Examiner withdraw the rejection of claim 4.

Claim Rejections - 35 U.S.C. § 103

Claims 1, 2 and 6-9 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Komata (JP 10-015118) in view of Nakahara et al. (U.S. Patent Application Publication Number 2003/0125127). Applicants respectfully traverse this rejection at least because the Examiner has failed to identify sufficient suggestion or motivation for modifying Komata with Nakahara, and because one of ordinary skill in the art would not have modified Komata with Nakahara as suggested by the Examiner.

Komata discloses a hollow golf club head. The Examiner asserts that the club head comprises a front body, a back body and a middle body. The Examiner acknowledges that Komata fails to disclose the longitudinal elastic modulus of any of the bodies at all, let alone the relationship as claimed. The Examiner tries to correct this deficiency of Komata with Nakahara.

However, Komata fails to teaches three sections which have different materials. Komata merely teaches dividing a golf club head into plural pieces and welding the divided pieces together. In general, unless otherwise stated, the term “welding” means joining pieces made of the same material together. In this case Komata fails to indicate that the welded back section 13 and center section 12 are made of different materials. Therefore, Komata fails to teach a middle body made of a different material than a back body.

The Examiner asserts that Fig. 6 and paragraph [0028] as teaching different materials for the back section 13 and the center section 12, but this paragraph of Komata does not teach different materials for each section. For instance, Fig. 6 shows that the back-section 13 and the

center section 12 are made of the same material, centrum material 2a. Paragraph [0029] states that the center section 12 and the back section 13 are produced by various metals. However, this paragraph does not mean that a different metal is used for center section 12 than for back section 13. Instead, this statement in Komata appears to mean that the metal that is used for both sections does not have to be a particular metal, but can be any one of a variety of metals. The Examiner is relying on Komata to show a middle body made of a different material than the back body. Because Komata does not teach this feature, then even if Komata were modified with Nakahara as suggested by the Examiner, the combination would still fail to teach at least this feature of the claimed invention.

Additionally, there is no motivation for combining Komata and Nakahara as suggested by the Examiner. First, Nakahara is directed to a cover member 6 for enclosing holes 2a, 4a. There is no indication that the teachings regarding the Nakahara cover 6 would be applicable absent a hole. Since there is no hole in Komata, there is no motivation to provide the Nakahara cover member 6 to fill the hole.

Furthermore, the Examiner asserts that Nakahara teaches aluminum as a cover member, and therefore would have the same elastic modulus as the claimed invention. However, Nakahara only teaches that aluminum alloy is a possible material for the cover member which may be used according to the kind of metallic material composing the head body. There is no indication that aluminum alloy would be the appropriate material for use with a titanium alloy. Therefore, there is no motivation to provide the aluminum alloy as the material.

In view of the above, claim 1 is allowable over the combined teachings and suggestions of Komata and Nakahara at least because one of ordinary skill in the art would not have been motivated to combine these references as suggested by the Examiner and because any combination would be deficient. Claims 2 and 6-9 depend from claim 1 and are therefore allowable at least because of their dependency.

Furthermore, claims 8 and 9 are further allowable because the combination of Komata and Nakahara does not teach or suggest the ratios set forth in these claims. The Examiner asserts that Fig. 6 of Komata shows a middle body which has a ratio to the rest of the club head of less than about 1/3. However, the Examiner's reliance on Fig. 6 as disclosing the ratios of claims 8 and 9 is improper. Drawings and pictures can anticipate claims only if they clearly show the structure which is claimed. Additionally, when a reference does not disclose that drawings are to scale, arguments based on measurements of the drawing features of little value. The drawings are useful only for what they reasonably teach one of ordinary skill in the art (*see* MPEP 2125). In this case, Komata Fig. 6 does not reasonably teach one of ordinary skill in the art the claimed dimensions. First, there is no indication that the drawing is to scale. Additionally, even if it were to scale, Fig. 6 shows a cross sectional view, whereas the claims set forth ratios of surface areas. The surface areas of the different sections cannot be accurately determined from the cross sectional view of Fig. 6 at least because the surface areas are not illustrated. Absent some teaching or suggestion in the description suggesting the relative surface areas of the sections, Fig. 6 does not teach the claimed ratio of areas. Nakahara also fails to teach the claimed ratios.

Accordingly, claims 8 and 9 are allowable at least because of their dependency and also at least because neither Nakahara nor Komata teach the ratio of the middle body to the rest of the club head as claimed.

Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



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